Application No. 09/767,680 Attorney Docket No. 58982.000010

January 29, 2007

**Amendments to the Claims:** 

This listing of claims will replace all prior versions and listings of claims in the application:

1-12. (Cancelled)

13. (Currently Amended) An isolated starter culture useful in manufacturing and preservation of

food and feed products comprising at least one modified lactic acid bacterial cell wherein said at

least one modified lactic acid bacterial cell comprises at least 0.1 ppm on a dry matter basis of a

porphyrin compound which includes iron, wherein said at least one modified lactic acid bacterial

cell is obtainable by culturing in a medium containing a protoporphyrin compound or its

complexes with an iron atom,

wherein said starter culture is in the form of a frozen or freeze-dried culture, and

wherein said starter culture comprises an amount of viable modified lactic acid bacterial

cells which is at least 10<sup>8</sup> CFU per gram.

14. (Currently Amended) The culture according to claim 13, wherein the culture is in the form

of a frozen, liquid or freeze-dried culture.

15. (Currently Amended) The culture according to claim 13, comprising an amount of viable

modified lactic acid bacterial cells which is in the range of [[ $10^4$ ]]  $\underline{10^{10}}$  to  $10^{12}$  CFU per gram.

16. (Currently Amended) The culture according to claim 13, which comprises modified lactic

acid bacterial cells of two or more different lactic acid bacterial strains, wherein said bacterial

cells are cultured aerobically and contain at least 0.1 ppm cytochrome d.

17. (Previously Presented) The culture according to claim 13, further comprising at least one

component which enhances the viability of the modified lactic acid bacterial cell during storage.

18-33. (Cancelled)

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- 34. (Previously Presented) The culture of claim 13, wherein the bacterial species of the at least one lactic acid bacterial cell which is modified is *Lactococcus lactis* strain CHCC373 deposited under the accession number DSM12015.
- 35. (Previously Presented) The culture according to claim 13, which includes a bacterial nutrient, a cryoprotectant or a bacterial nutrient and a cryoprotectant.
- 36. (Previously Presented) The culture according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 0.2 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 37. (Previously Presented) The culture according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 1 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 38. (Previously Presented) The culture according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 5 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 39. (Previously Presented) The culture according to claim 13, wherein the at least one modified lactic acid bacterial cell comprises at least 20 ppm on a dry matter basis of the porphyrin compound which includes iron.
- 40. (Previously Presented) The culture according to claim 13, which is useful in the preservation of food and feed products.
- 41. (Previously Presented) The culture according to claim 13, which is useful in the dairy industry.
- 42. (Previously Presented) The culture according to claim 13, which is capable of reducing the oxygen content in an edible product.

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43. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell comprises at least 0.5 ppm on a dry matter basis of a cytochrome.

44. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell comprises at least 10 ppm on a dry matter basis of a cytochrome.

45-47. (Cancelled)

48. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 1% per

hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by culturing in

a medium containing 10 mg/L haemin.

49. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 20% per

hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by culturing in

a medium containing 10 mg/L haemin.

50. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 40% per

hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by culturing in

a medium containing 10 mg/L haemin.

51. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 70% per

hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by culturing in

a medium containing 10 mg/L haemin.

52. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell reduces the amount of oxygen present in a medium by at least 90% per

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hour, and wherein the at least one modified lactic acid bacterial cell is obtainable by culturing in

a medium containing 10 mg/L haemin.

53-55. (Cancelled)

56. (Previously Presented) The culture according to claim 13, wherein the at least one modified

lactic acid bacterial cell exhibits a modified aerobic breakdown of carbohydrates as compared to

a lactic acid bacterial cell which has not been modified and which does not comprise at least 0.1

ppm on a dry matter basis of a porphyrin compound which includes iron.

57. (Cancelled)

58. (Previously Presented) The culture according to claim 13, wherein the protoporphyrin

compound or its complexes with an iron atom is heamin or haeme.

59. (Previously Presented) The culture according to claim 13, wherein the protoporphyrin

compound or its complexes with an iron atom is heamin.

60. (Previously Presented) The culture according to claim 13, wherein the porphyrin compound

which includes iron is heamin or haeme.

61. (Previously Presented) The culture according to claim 13, wherein the porphyrin compound

which includes iron is heamin.

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